CLAIMS

We claim:

1. A cooling system for air cooling a plurality of at least two different heat exchange fluids comprising:

a plurality of at least three heat exchangers, each having a core with opposed ends, opposed sides extending between said ends and spaced from one another by a core width, spaced headers, one at each end, an inlet face and an outlet face spaced from one another by a core depth,

said heat exchangers being arranged in adjacency in the configuration of a polygonal solid with their inlet faces located radially inward of their outlet faces and with each header in substantial abutment with a header of one of the other heat exchangers to define an open center housing;

a radial fan within said housing and rotatable about an axis;

a front panel having an air inlet on said axis and abutting a corresponding one of said opposed sides of each said heat exchanger;

a rear panel abutting the others of said opposed sides of each of said heat exchangers and journaling said fan for rotation about said axis;

and characterized by the core width of one of said heat exchangers being greater than that of another of said heat exchangers such that one or both of said opposed sides of said one heat exchanger projects forwardly and/or rearwardly of a corresponding one or both of said opposed sides of said another heat exchanger.

2. The cooling system of claim 1 wherein said one of said heat exchangers has a core depth that is different from the core depth of said another heat exchanger.

3. The cooling system of claim 2 wherein the core depth of said one heat exchanger is greater than the core depth of said another heat exchanger.

4. The cooling system of claim 1 wherein said configuration includes a top side defined by said one heat exchanger, said one heat exchanger being a charge air cooler.

5. The cooling system of claim 1 wherein said one heat exchanger projects forwardly of said air inlet of said front panel and said front panel includes a beveled surface located between said air inlet and said one of said opposed sides of said one heat exchanger.

6. The cooling system of claim 1 wherein said one of said opposed sides of said one heat exchanger is imperforate and defines part of said front panel.

7. The cooling system of claim 1 wherein one or both of said front and rear panels includes a bend extending respectively to said one or said both of said opposed sides of said one heat exchanger.

8. A cooling system for air cooling a plurality of at least two different heat exchange fluids comprising:

a plurality of at least three heat exchangers, each having a core with opposed ends, opposed sides extending between said ends and spaced from one another by a core width, spaced headers, one at each end, an inlet face and an outlet face spaced from one another by a core depth,

said heat exchangers being arranged in adjacency in the configuration of a polygonal solid with their inlet faces located radially inward of their outlet faces and with each header in substantial abutment with a header of one of the other heat exchangers to define an open center housing;

a radial fan within said housing and rotatable about an axis;

a front panel having an air inlet on said axis and abutting a corresponding one of said opposed sides of each said heat exchanger;

a rear panel abutting the others of said opposed sides of each of said heat exchangers and journaling said fan for rotation about said axis;

and characterized by the core width of one of said heat exchangers being greater than that of another of said heat exchangers such that one or both of said opposed sides of said one heat exchanger projects forwardly and/or rearwardly of a corresponding one or both of said opposed sides of said another heat exchanger,

said one heat exchanger being a charge air cooler located at the top of said polygonal configuration and having a core depth greater than another of said heat exchangers.

9. A cooling system for air cooling a plurality of at least two different heat exchange fluids comprising:

a plurality of at least three heat exchangers, each having a core with opposed ends, opposed sides extending between said ends and spaced from one another by a core width, spaced headers, one at each end, an inlet face and an outlet face spaced from one another by a core depth,

said heat exchangers being arranged in adjacency in the configuration of a polygonal solid with their inlet faces located radially inward of their outlet faces and with each header in substantial abutment with a header of one of the other heat exchangers to define an open center housing;

a radial fan within said housing and rotatable about an axis;

a front panel having an air inlet on said axis and abutting a corresponding one of said opposed sides of each said heat exchanger;

a rear panel abutting the others of said opposed sides of each of said heat exchangers and journaling said fan for rotation about said axis;

and characterized by the core width of one of said heat exchangers being greater than that of another of said heat exchangers such that one or both of said opposed sides of said one heat exchanger projects forwardly and/or rearwardly of a corresponding one or both of said opposed sides of said another heat exchanger,

said one opposed side of said one heat exchanger being adjacent said front panel and extending forwardly of said air inlet,

said front panel having a beveled surface between said air inlet and said one opposed side of said one heat exchanger.